



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/508,788

09/23/2004

Nobuyuki Masumura

2004_1509A

3936

513 7590 06/25/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

PILKINGTON, JAMES

ART UNIT

PAPER NUMBER

3682

MAIL DATE

DELIVERY MODE

06/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/508,788	Applicant(s) MASUMURA ET AL.	
	Examiner JAMES PILKINGTON	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-32 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 and 27-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-26 and 34-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Prosecution Application

The request filed on 5/6/08 for a Continued Examination (RCE) is accepted and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-26 and 34-43, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al, EP 1083347 A2 (published March 14, 2001) in view of Askeland (copyright 1994) in view of Kavesh, USP 4,536,536.

Matsumoto discloses a belt for a ball chain comprising;

- a tape (21, Figure 7 and 8) of synthetic resin (C2/L52-53)
- extending along longitudinal edges and integral with the tape a stretched fibrous member (23, C7/L38-55) of thermoplastic resin (Matsumoto discloses synthetic resin C7/L38-55) that are positioned inwardly of the corresponding edge (Figure 8 shows that stretched member 23 is inward of the edge of the belt)
- ball inseting holes (20) spaced at equal intervals along a straight line (spaced apart by projections 22) between the longitudinal edges
- projections (22) disposed around the holes

- both resins are in the same family by virtue of comprising principal components of identical resins (both resins can have carbon)

Matsumoto does not disclose that the fibers are oriented longitudinally along said stretched fibrous member.

Askeland teaches that orienting fibers/molecular chains (a fiber is made of a molecular chain) in a direction parallel to the force being applied, which is the longitudinal direction, to the belt body provides a greater tensile strength (pages 540-543, in particular Figure 16-12).

It would have been obvious to one of ordinary skill in the art to use fibers/molecular chains oriented in a direction longitudinal along the stretched fibrous member in Matsumoto to increase the tensile strength of the overall device as taught by Askeland. Using a known technique to improve the tensile strength of Matsumoto would have been obvious to one of ordinary skill.

Matsumoto in view of Askeland as applied above does not disclose that the stretched fibrous member is obtained by stretching a yet-unstretched fibrous member to obtain a greater tensile strength.

Kavesh teaches that it is known to stretch a yet-unstretched fibrous member to obtain a member with greater tensile strength, modulus, toughness, dimensional and hydrolytic stability and high resistance to creep under sustained loads (C2/L60-63). Application of these stretched fibers is also disclosed to be reinforcements in thermoplastics, thermosetting resins and power transmission belts (C3/L15-20).

Using a stretched fibrous member obtained from stretching a yet-unstretched member would have been obvious to one of ordinary skill in the art since using a known technique to improve a similar device in the same way is obvious.

Response to Arguments

3. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Note: The Applicant argues on page 8 that the prior art does not provide for a "fibrous member-forming material to be both greater in tensile strength and strongly bonded to the belt-forming material." This limitation, particularly the bonded feature, is not recited in the claims

4. Regarding the Applicant's remarks about the prior art not disclosing identical or resins that are in the same family. As broadly recited the "same family" limitation can simply mean that both material are resins, no support for a different definition is found in the specification or the remarks. Regarding "identical" resins, the claim reads "identical resins or include principal components of identical resins." A principal component as disclosed in the prior art is carbon.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P./
Examiner, Art Unit 3682
6/10/08

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3682